

FIG. 1

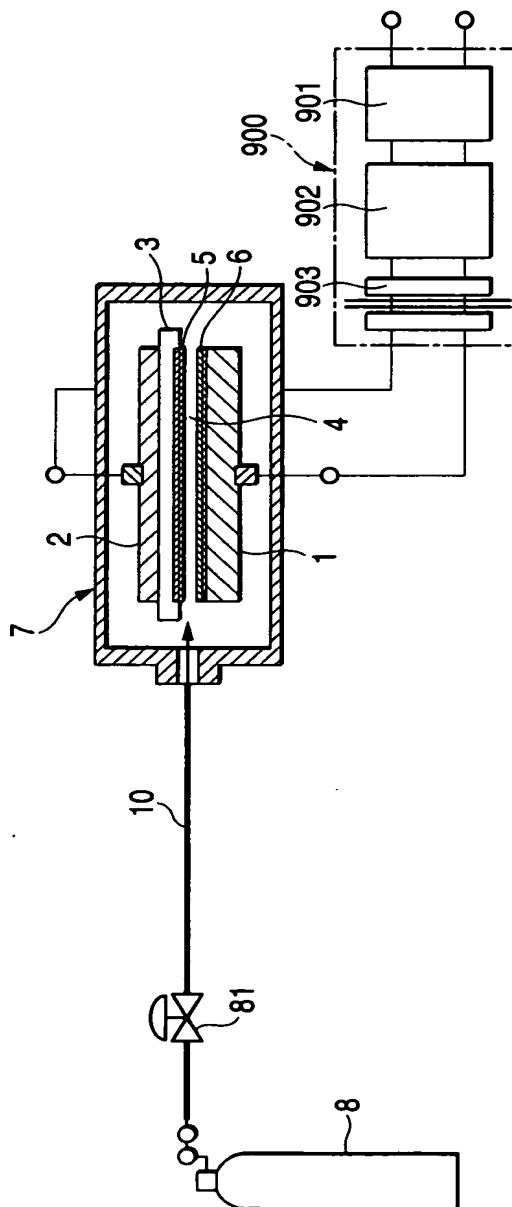


FIG. 2

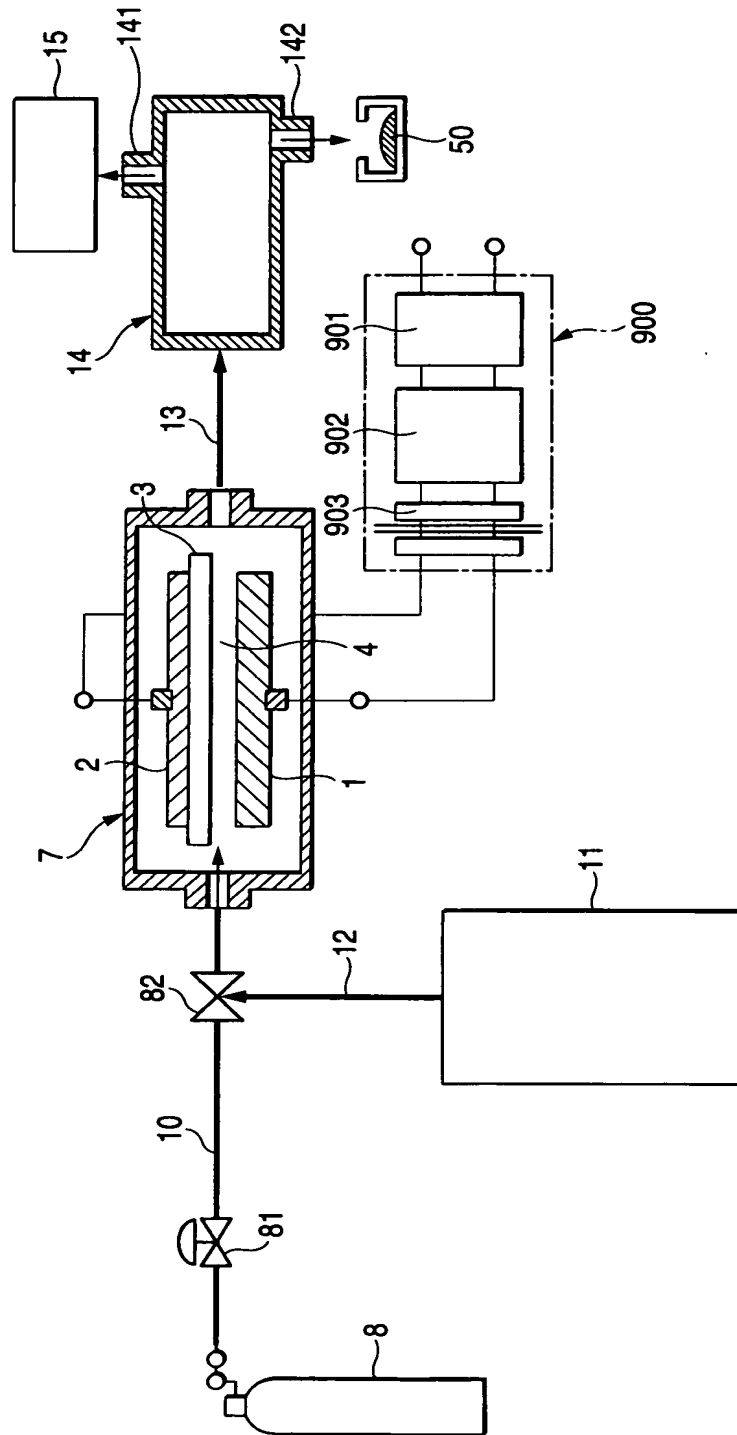
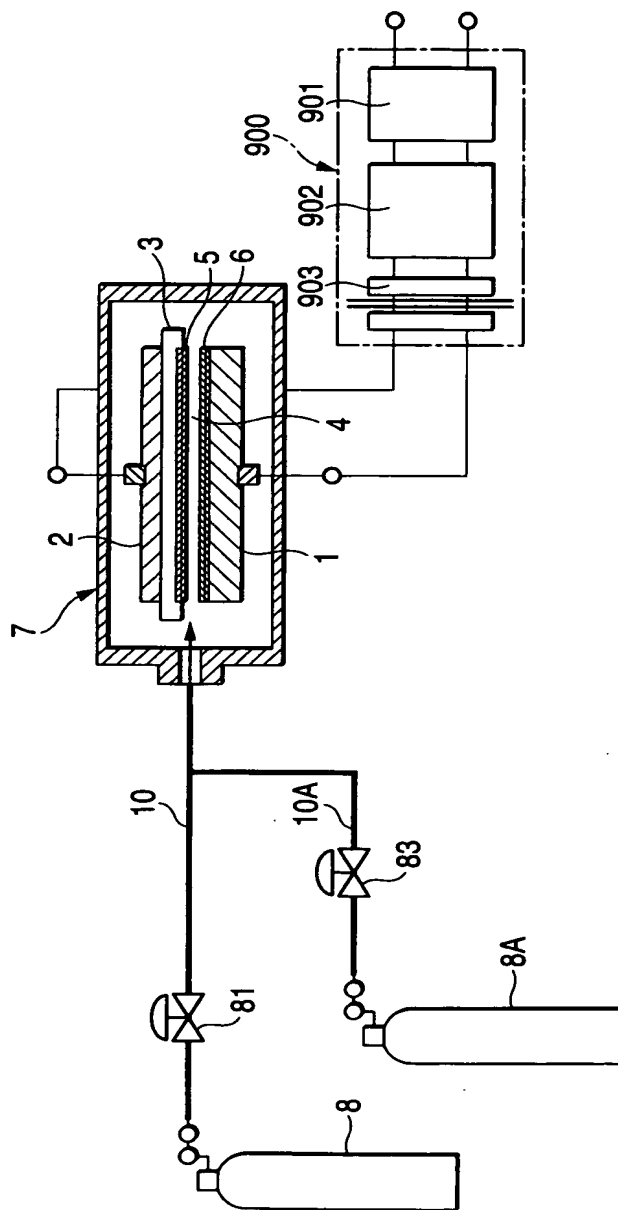
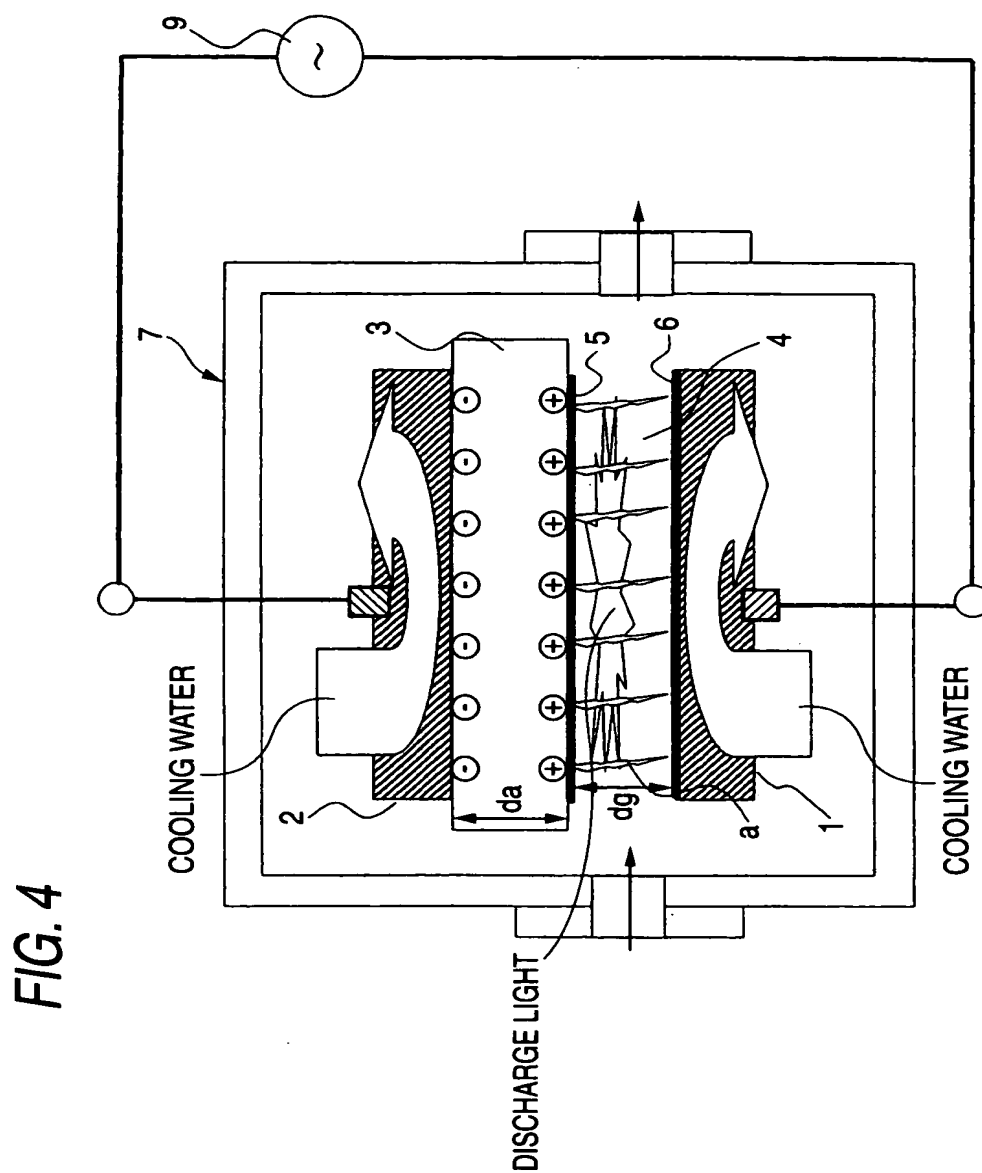


FIG. 3





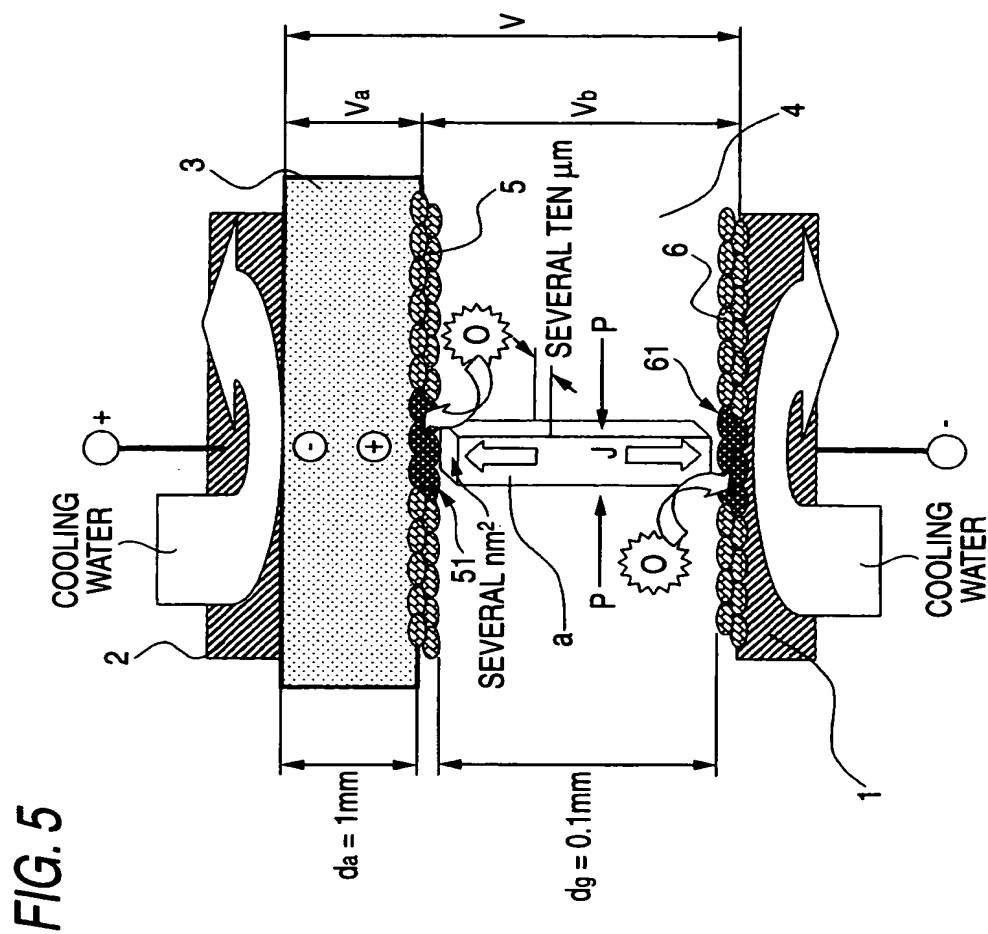


FIG. 6

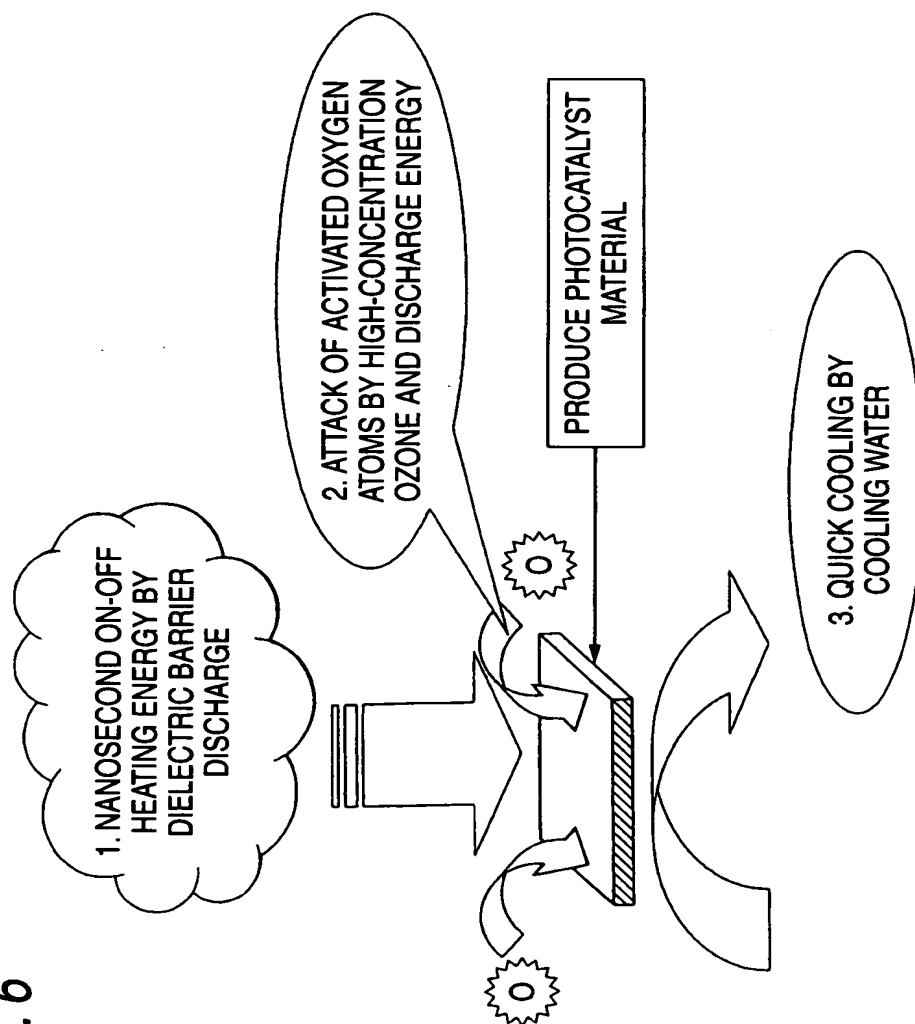


FIG. 7

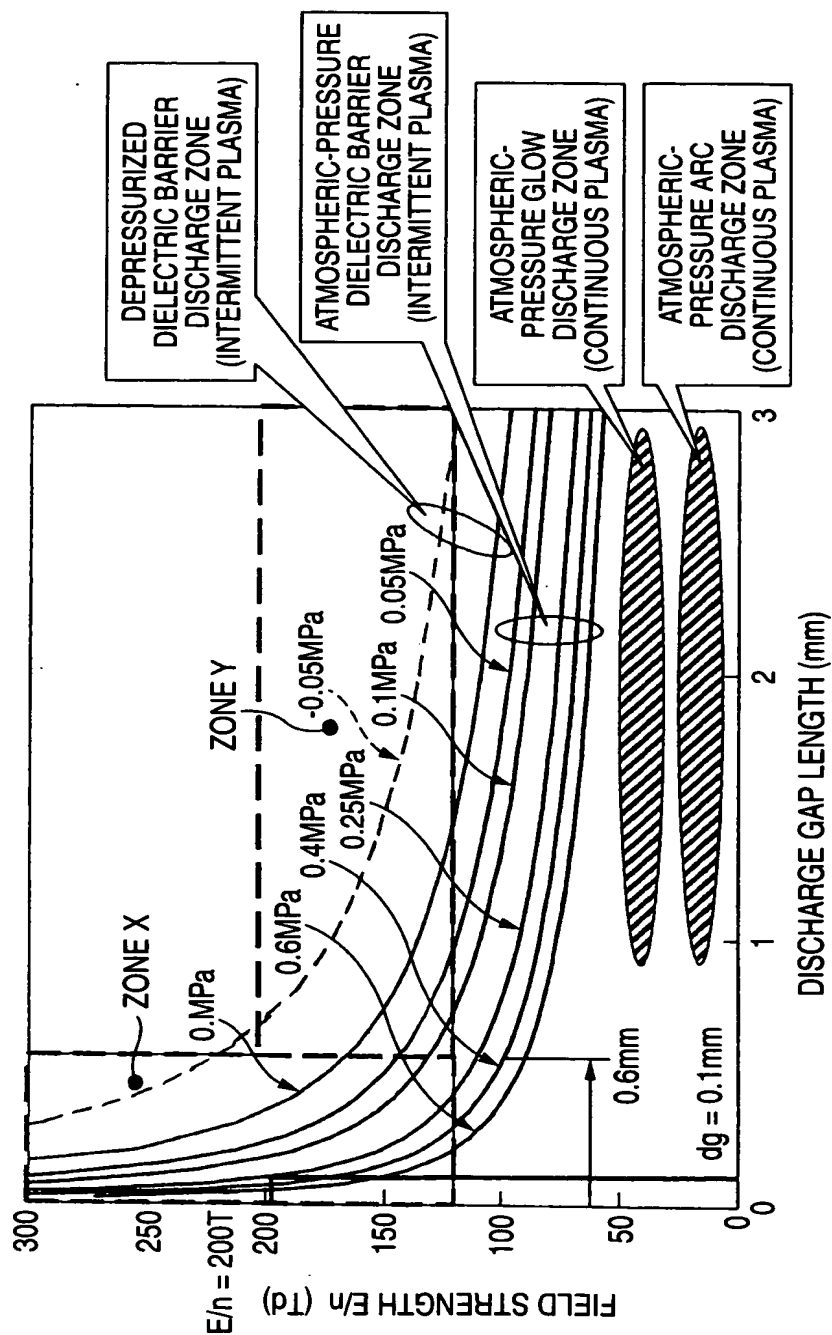


FIG. 8

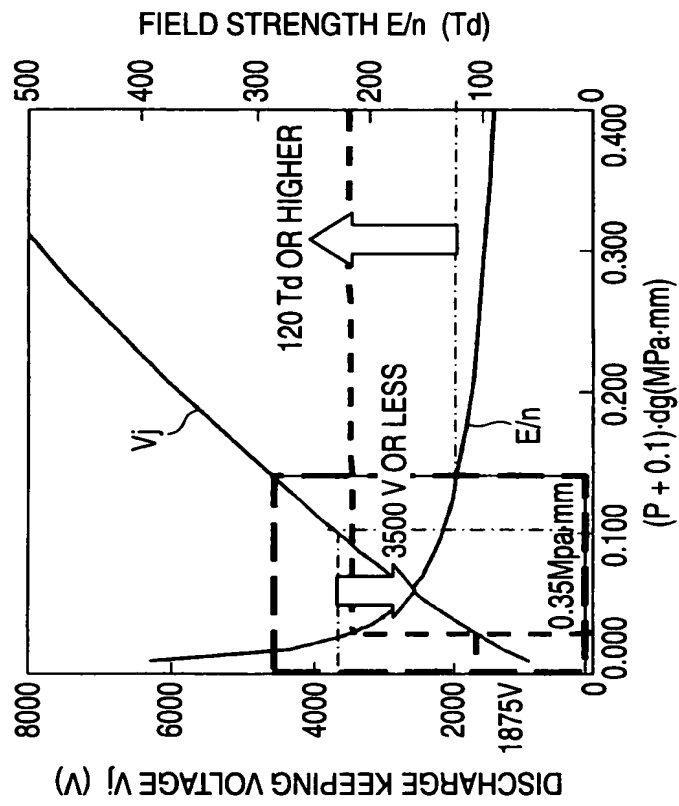




FIG. 9

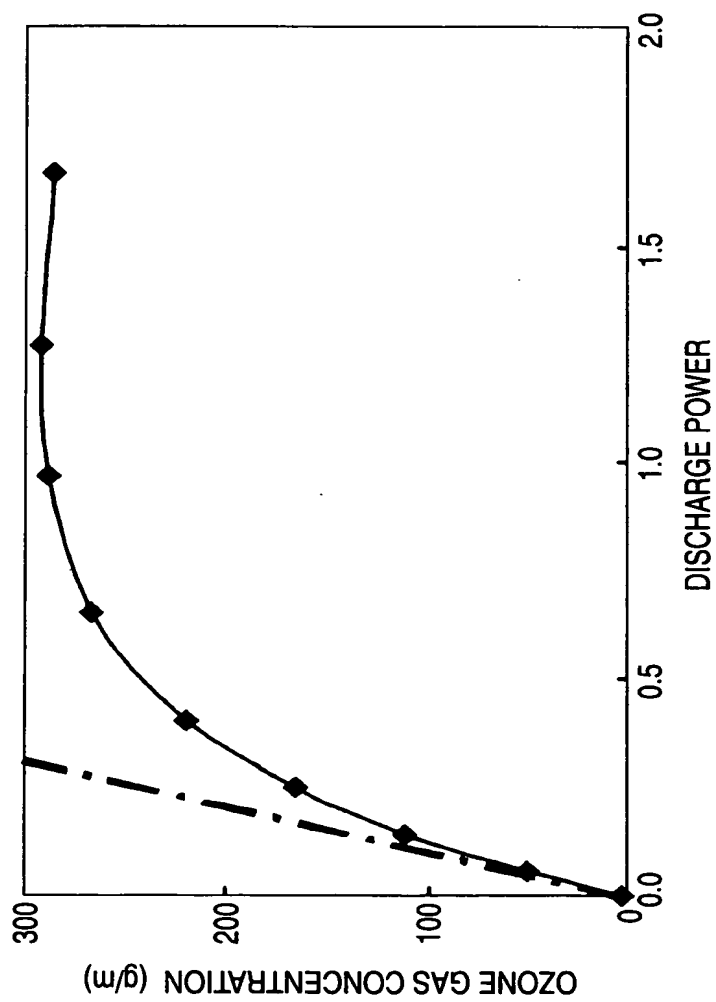


FIG. 10

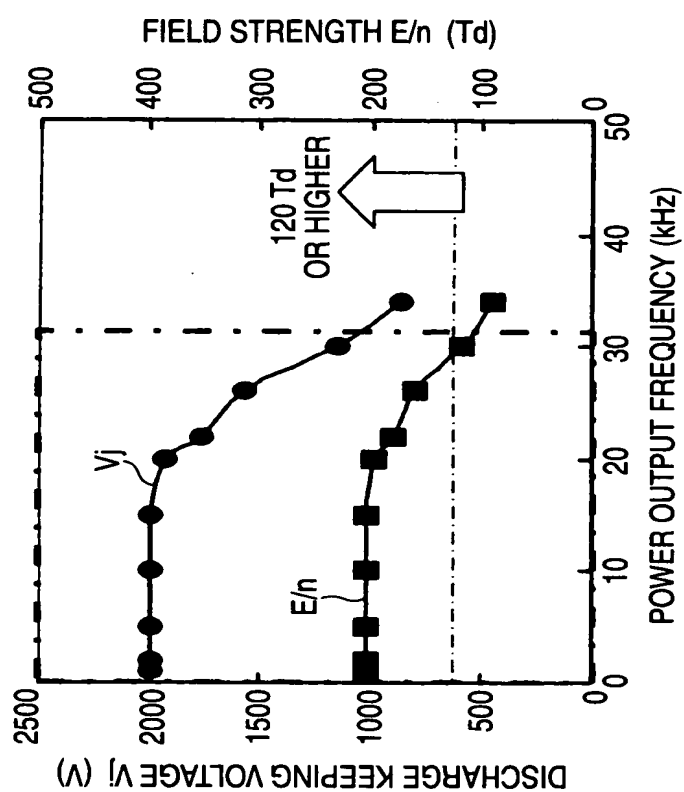


FIG. 11

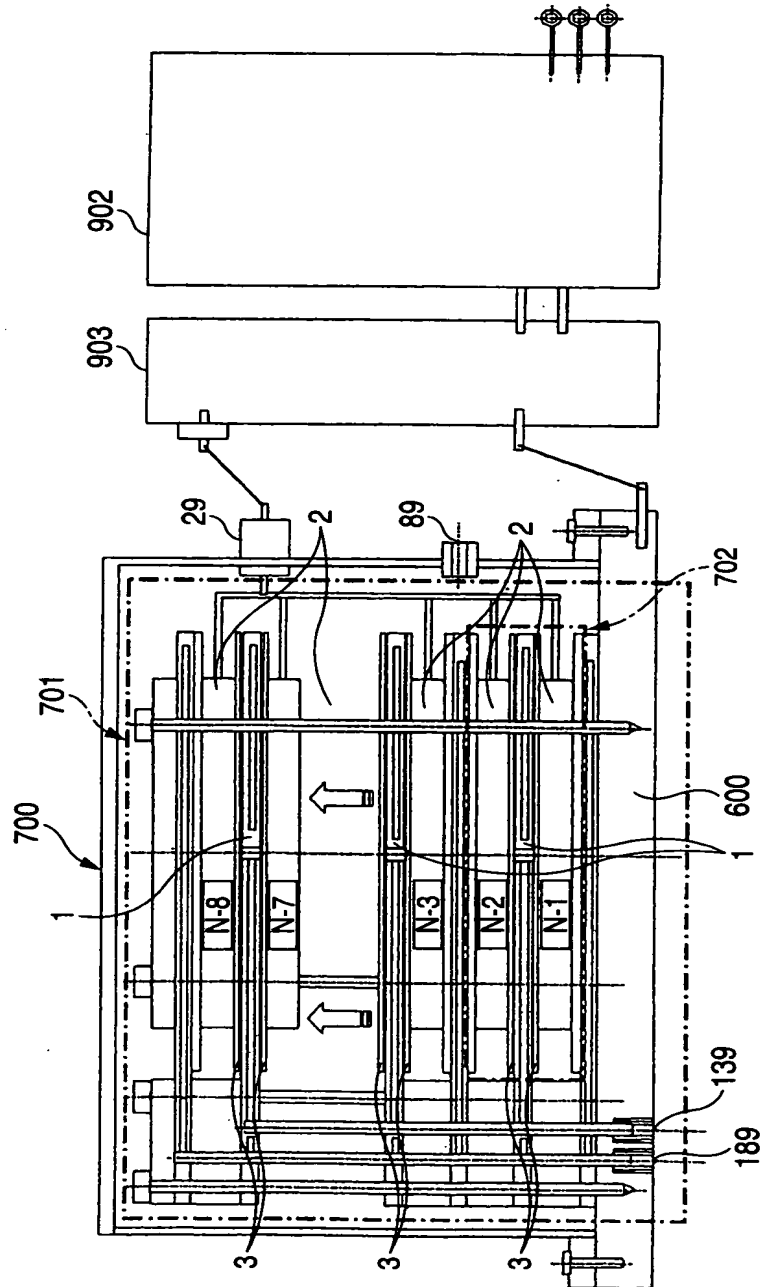


FIG. 12

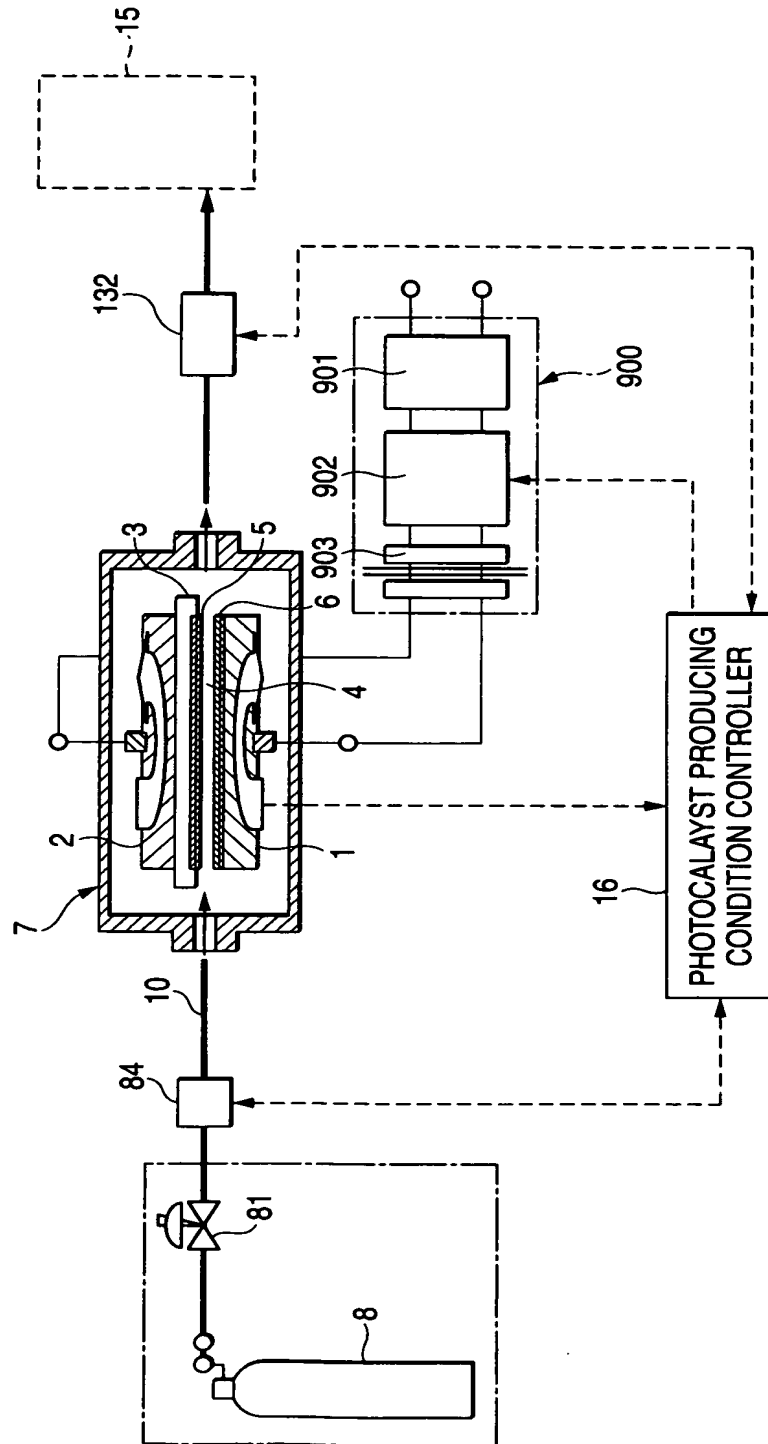


FIG. 13

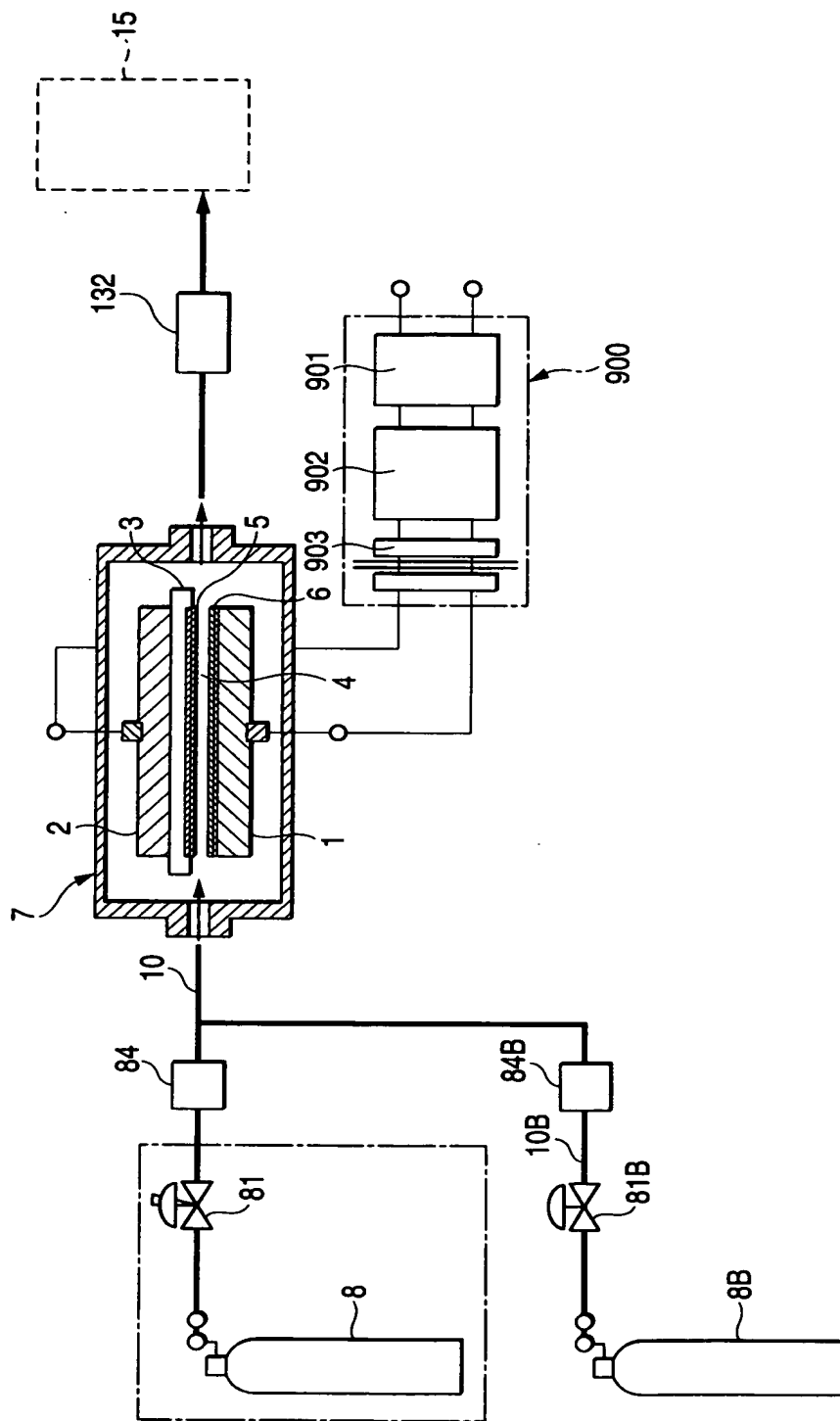
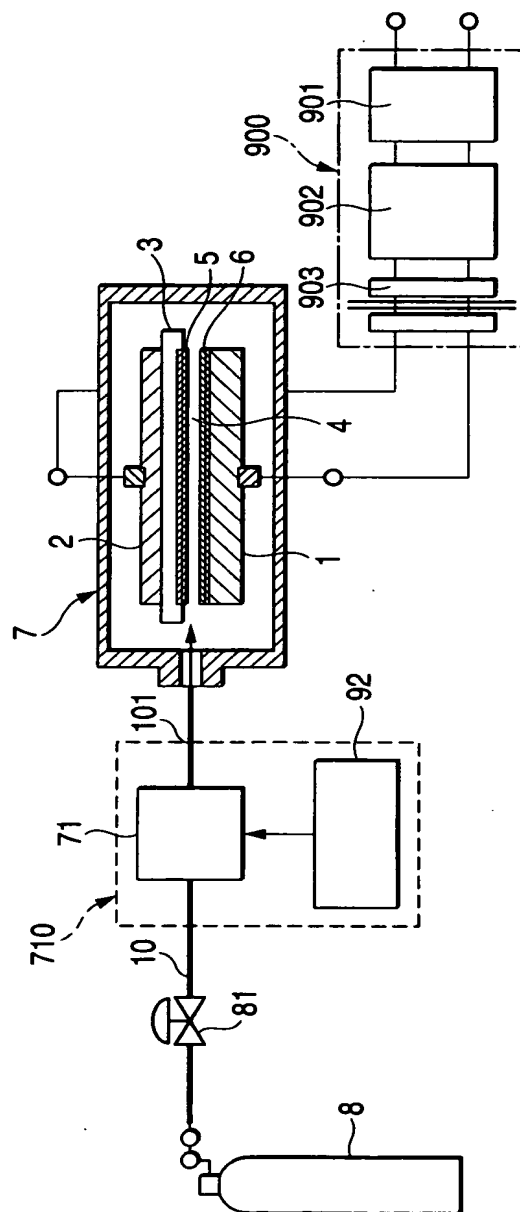


FIG. 14



	QUARTZ (SiO <sub>2</sub> )	ALUMINA (Al <sub>2</sub> O <sub>3</sub> )	TiO <sub>2</sub> (ANATASE)	TiO <sub>2</sub> (RUTILE)	TUNGSTEN OXIDE (WO <sub>3</sub> )
ENERGY GAP	7.8eV	7.0eV	3.2eV	3.0eV	2.8eV
ABSORPTION WAVELENGTH OF PHOTOCATALYTIC EFFECT	159nm (VACUUM ULTRAVIOLET)	177nm (VACUUM ULTRAVIOLET)	388nm (ULTRA- VIOLET)	413nm (VISIBLE)	443nm (VISIBLE)

	IRON OXIDE (Fe <sub>2</sub> O <sub>3</sub> )	CHROMIUM OXIDE (Cr <sub>2</sub> O <sub>3</sub> )	Cu <sub>2</sub> O	In <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> TiO <sub>3</sub>
ENERGY GAP	2.2eV	2.07eV	2.2eV	2.5eV	<2.8eV
ABSORPTION WAVELENGTH OF PHOTOCATALYTIC EFFECT	564nm (VISIBLE)	600nm (VISIBLE)	564nm (VISIBLE)	496nm (VISIBLE)	443nm (VISIBLE)

	PbO	V <sub>2</sub> O <sub>5</sub>	FeTiO <sub>3</sub>	Bi <sub>2</sub> O <sub>3</sub>	Nb <sub>2</sub> O <sub>3</sub>
ENERGY GAP	2.8eV	2.8eV	2.8eV	2.8eV	3.0eV
ABSORPTION WAVELENGTH OF PHOTOCATALYTIC EFFECT	443nm (VISIBLE)	443nm (VISIBLE)	443nm (VISIBLE)	443nm (VISIBLE)	413nm (VISIBLE)

	SrTiO <sub>3</sub>	ZnO	BaTiO <sub>3</sub>	CaTiO <sub>3</sub>	SnO <sub>2</sub>
ENERGY GAP	3.2eV	<3.3eV	3.3eV	3.4eV	3.6eV
ABSORPTION WAVELENGTH OF PHOTOCATALYTIC EFFECT	388nm (ULTRA- VIOLET)	376nm (ULTRA- VIOLET)	376nm (ULTRA- VIOLET)	365nm (ULTRA- VIOLET)	344nm (ULTRA- VIOLET)

FIG. 15